



Department of Commerce

Safety & Buildings Division

201 West Washington Avenue

P.O. Box 2658

Madison, WI 53701-2658

Evaluation # 200400-I

Wisconsin Building Products Evaluation

Material

Modular Sandwich Panels for
Walk-In-Coolers and Freezers

Manufacturer

Carroll Coolers
19705 Hwy. 30 W.
Carroll, IA 51401

SCOPE OF EVALUATION

GENERAL: This report evaluates the use of foam plastic material in walk-in coolers and freezers, manufactured by Carroll Coolers.

The **IBC** requirements below in accordance with the current **Wisconsin Amended ICC Code**:

- **Foamed-in-place Urethane Core:** The Carroll Cooler foam plastic sandwich panel was evaluated under the foam plastic requirements in accordance with ss. **IBC 2603.1, 2603.2, 2603.3 Exception 4., 2603.4.1.3, 2603.5.2 and 2603.7.**
- **Wall and Ceiling Panel:** The Carroll Cooler foam plastic sandwich panel was evaluated as an insulated wall and ceiling panel used in walk-in coolers and freezers in accordance with ss. **IBC 2603.4.1.2, 2603.4.1.3, 2603.5.2 and 2603.7.**

The structural performance and thermal transmission properties of the panels are outside the scope of this evaluation and are subject to specific evaluation and approval by the building plan reviewer.

DESCRIPTION AND USE

Carroll coolers and freezers consist of 5-1/2 and 3-1/2 inch thick wood-framed wall and ceiling panels with foamed-in-place urethane insulation cores, and Stucco Galvanized steel cladding. A variety of optional finishes are available. The panels have tongue and groove construction and are joined together using a cam lock fastener that is operated with a hex wrench.

TESTS AND RESULTS

Testing on 5-1/2 inch thick wood-framed panels was conducted in accordance with the Underwriter's Laboratories Standard "Fire Test of Interior Finish Material, UL 1715". The 5-1/2 inch thick wood edged panels had foam plastic core material, at a nominal density of 2.0 lb./ft³ surfaced with 26 gauge (0.0179-inch) steel facers. Steel or plastic plug buttons are provided by the manufacturer to be insert into the cam-lock access holes after assembly.

SURFACE BURNING CHARACTERISTICS

	Core Material	3-1/2 to 5-1/2 inch Thick Painted or Unpainted Steel Finished Panel	3-1/2 to 5-1/2 inch Thick Painted or Unpainted Aluminum Finished Panel
Flame Spread	25	20	20
Smoke Developed	450	350	250

Test data is on file with the department.

LIMITATIONS OF APPROVAL

The **IBC** limitations below are in accordance with the current **Wisconsin Amended ICC Code**:

- **Wall and Ceiling Panel: Section IBC 2603.7** allows the use of Carroll cooler walk-in cooler and freezer panels without a thermal barrier and automatic sprinkler system based on diversified tests, to a maximum height of 8 feet and 5-1/2 inch thickness as required under **s. IBC 2603.4.1.3** and **s. IBC 2603.5.2**.

This approval will be valid through December 31, 2009, unless manufacturing modifications are made to the product or a re-examination is deemed necessary by the department. The product approval is applicable to projects approved under the current edition of the applicable codes. This approval may be void for project approvals made under future applicable editions. The Wisconsin Building Product Evaluation number must be provided when plans that include this product are submitted for review.

DISCLAIMER

The department is in no way endorsing or advertising this product. This approval addresses only the specified applications for the product and does not waive any code requirement not specified in this document.

Revision Date:

Approval Date: March 8, 2004 By: _____

Lee E. Finley, Jr.
Product & Material Review
Integrated Services Bureau

